

## **ABSTRACT OF THE DISCLOSURE**

The present invention relates to a transgenic non-human mammal whose germ cells and somatic cells contain a knockout mutation in DNA encoding orphan nuclear receptor  $ERR\alpha$ . More specifically, the invention relates to

5 knockout mice whose germ cells and somatic cells contain a knockout mutation in DNA encoding orphan nuclear receptor  $ERR\alpha$ . The invention further relates to such knockout non-human mammals which express an  $ERR\alpha$  gene which is different from the endogenous gene which was disrupted. In a particular embodiment, the invention relates to a transgenic mouse having its endogenous

10  $ERR\alpha$  gene disrupted and expressing human  $ERR\alpha$ . As well, the invention relates to cell lines in which  $ERR\alpha$  activity (and/or level) has been inactivated or augmented. The invention further relates to uses and methods of the transgenic animals of the present invention to select agents which modulate the expression and/or activity of  $ERR\alpha$ .